I, Alfred E. Kahn, declare upon penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge and belief.

Signed Alfred E. Kahn

May 30, 1996

I, Timothy J. Tardiff, declare upon penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge and belief.

Signed Jundhy . Jardy Timothy J. Tardiff

May 30, 1996

Before The Federal Communications Commission Washington D. C. 20554

In the Matter of Implementation)	
of the Local Competition Provisions)	CC Docket No. 96-98
in the Telecommunications Act of 1996)	

Declaration of Richard A. Epstein

- 1. My name is Richard A. Epstein and I am the James Parker Hall Distinguished Service Professor of Law at the University of Chicago. I received an A.B. degree from Columbia University in 1966, a B.A. (Juris.) from Oxford University in 1966; and an LL.B. degree from Yale University in 1968. I have done extensive work on the communications industry and in the law of takings. I have been retained in this matter by Bell Atlantic Corp. and SBC Communications Inc.
- 2. The purpose of this statement is to assess the takings claims that arise out of this rulemaking insofar as they pertain to certain key questions of how pricing between alternative exchange carriers should take place under the Telecommunications Act of 1996. The basic proposition here is that the Fifth Amendment of the Constitution—"nor shall private property be taken for public use, without just compensation"—applies to Incumbent Local Exchange Carriers (ILECs) after the passage of the 1996 Act just as it did before and that the applicable constitutional standard requires the ILECs to be able over the life of their investments to recover their total economic cost of providing service, which includes not only forward-looking TSLRIC (total service long run incremental costs) but also reasonable joint and common costs of running the network, the historical or embedded costs incurred in setting that network up, and a reasonable profit on this total cost. These concerns should animate the FCC in dealing with the major issues of the rulemaking proceedings. In particular, three points stand out:

First, that under the takings clause, the use of forward-looking TSLRIC provides a constitutionally inadequate base for pricing interconnection between exchange carriers.

Second, that the mandatory resale of retail services to competitive local exchange carriers (CLECs) at the subsidized rates for which they are offered to consumers, less avoided costs, could raise serious takings questions.

Third, that the adoption of the bill and keep proposal for the transport and termination of calls could likewise constitute a taking of the ILECs property, without just compensation.

3. Some initial observations about the 1996 Telecommunications Act will help to set these claims in perspective. It has been said that the Act introduces a competitive regime in telecommunications by facilitating entry of many companies into all local and long distance markets. The statement is only a partial truth. While the Act encourages multiple entry at all levels of the market, it does not create—it cannot create—a pure competitive industry. In a true competitive market, all firms operate independently of one another; none has a direct interest in the survival and viability of its competitors: and none can commandeer by the use of state power any resources owned by its rivals.

- 4. The arrival of a "competitive" telecommunications market under the 1996 Act does not eliminate a government role in forging interconnections between competitive network providers. The FCC, and the statements of AT&T and MCI have made much of the risk that the ILECs can "hold out" for compensation in excess of economic cost. But they have largely ignored the inverse risk, that the mandated terms for interconnections between competitive local exchange carriers (CLECs) and the ILECs will force the ILECs to provide CLECs services at below economic cost such that the ILECs could not recover their investments, plus a reasonable rate of return thereon, from the creation of the network infrastructures on which the CLECs' own businesses depend.
- 5. This second risk is one of constitutional dimensions. The standard constitutional doctrine on rate regulation contains two parts. The justification for regulation is to control the pricing policies of natural monopolies. But left without constitutional supervision, price regulation could be so stringent as to leave the regulated monopolist in an untenable position. The typical natural monopoly must incur high sunk costs to establish its basic network. The marginal cost of providing additional units once the network is established is often quite low. A regulatory policy that provided the regulated industry with rates sufficient to cover its variable costs plus a bit more would be sufficient to keep the firm in business in the short term: it would lose more money if it abandoned its market, for then none of its original investment could be recovered. Yet by the same token a pricing policy that did not allow the regulated firm to receive a reasonable rate of return on its initial investment would be disastrous in the long-term, for no new capital could be attracted to the business under a legal regime that threatened confiscation through regulation. See Reply Statement of Jerry A. Hausman, ¶¶ 3, 10-11 (attached to USTA filing). So the takings clause has long been invoked to insure that preventing monopoly pricing did not become a pretext for the confiscation of invested capital. See Hope Natural Gas v. FPC, 320 U. S. 591 (1944); Duquesne Light Co. v. Barasch, 488 U. S. 299 (1989); Jersey Central Power & Light Co. v. FERC, 810 F.2d 1168 (D.C. Cir. 1987).
- 6. It follows that the takings issue in the context of regulated industries must be evaluated comprehensively over the useful life of the underlying investment. To look at the problem as involving only the pricing for present and future periods seriously misstates the fundamental inquiry. It is as though, for example, the government decided to limit the prices that drug companies could charge for their products to a sum equal to their marginal cost of production, after the drug had been developed. That rule would end all further development, even if it increased consumption of the particular drug in the short run. Or, it is as though no patent and copyright protection should be

supplied at all, since the marginal cost of production of a writing or invention was zero. The supply of new writings or inventions would similarly cease

7. The form of regulation in telecommunications has changed radically over the years, but this basic tension remains. Regulation to avoid monopoly excesses must itself be constrained constitutionally to prevent confiscation through artificially low rates. It is not correct therefore simply to postulate that the possession of some degree of ILEC monopoly power justifies whatever scheme of rate regulation Congress or the FCC can devise. The appropriate scheme must be alert to the risks of expropriation through regulation of ILECs just as it must be aware of the risk of monopoly extraction. Both risks cannot be simultaneously driven to zero, but any Congressional or FCC policy that consciously and systematically ignores the risk of expropriation will surely run afoul of the commands of the takings clause. In fact each of the three pricing proposals for interconnection made by AT&T and MCI appear to violate the takings clause.

I. Pricing interconnections on forward looking TSLRIC constitutes a taking of the ILECs invested capital without just compensation.

- 8. The general principles of rate-base rate-of-return regulation applied to the network investments made over the years by the ILECs. The ILECs were all subject to regulation by both federal and state regulators. The object of that system was to develop a set of rates that, among other objectives, authorized a reasonable rate of return on invested capital over its anticipated useful life. These investments made under that system were not unilaterally set by the ILECs, but were subject to intense utilization reviews at both the FCC and the state level. The purpose of these reviews was to counteract the incentive of regulated industries to overinvest in the size of their base in order to expand their potential rate of return. More recently, regulators have adopted price cap regulation under which gains from unnecessarily expanding an investment base have been sharply diminished and the incentives have been reversed.
- 9. Nonetheless, some parties have suggested that regulators should presume that LECs historically have overinvested and deny them an opportunity to recover the cost of that investment. At the very least, the elementary requirements of procedural due process make it wholly impermissible to <u>presume</u> after the fact that these investments were not properly incorporated into the rate base in the first place. The proposal offends the principle of finality with respect to the initial rate hearings, and seeks to work a fundamental revision of vested property rights on the strength of new and unannounced standards, without the benefit of notice or hearing to contest them.

- 10. The objections are also substantive. It is wrong to treat questions of optimal pricing as a one period issue. Any system of pricing that takes the long view must evaluate all the effects of the pricing program. The initial investment decisions of ILECs were made and scrutinized under a constitutional regime that assured that the costs prudently incurred today could be recovered in the future. Yesterday's future is today. The proposal of AT&T and MCI is to urge the FCC to renege on that earlier promise by treating yesterday's protected investments as today's sunk costs, and thereby to introduce major distortions on any decision of whether or not to build capital assets. The FCC also inquires about the proper status of these historical costs. NPRM ¶ 144. The danger is that the law will use one understated definition of cost when the economics of the situation requires a fuller and more accurate accounting. See Affidavit of Jerry A. Hausman, ¶ 15: "These sunk costs will not be counted in the forward looking costs of a LRIC, but they are again investments incurred by the LEC in building its network." The clear implication is that if these costs are excluded once and for all from the cost base of the system when interconnection costs are calculated, then the command of Hope Natural Gas is violated.
- 11. One response to this substantive objection is that the ILECs took the risk of a change in legal system and thus cannot complain because their investments represented a gamble that failed. But there is no evidence whatsoever that their initial investments should be treated, after the fact, as a wager. The earlier ratemaking proceedings covered many contingencies, but no one has presented any evidence that the allowable rates were boosted above competitive levels to compensate the ILECs for the risk that their historical costs could not be recovered after a change in the basic regulatory scheme. Quite the contrary, the earlier rates were tied to competitive prices because the constitutional regime guaranteed a recovery of these costs come what may.
- 12. A second argument for ignoring historical costs is implicitly suggested in Joseph Farrell's speech of May 15, 1996, "Creating Local Competition" at pp. 11-12. His basic argument is that the protection of the ILECs' natural monopoly should be regarded as similar to the protection afforded to patents, which give the inventors monopoly protection for a limited time, after which the invention falls into the public domain. The suggested parallel claims that because the ILECs have long enjoyed monopoly power, Congress may now see fit to open their networks to common use. But the comparison fails on at least three grounds. First, the patent policy is made explicit at the creation of the patent, and is not imposed unilaterally after the patent is issued. No one would think it proper if Congress just shortened the period of patent protection for existing patents, without paying just

compensation. Second, the ILECs were subject to extensive state and federal regulation at all points in their lives, while the holder of a patent has unlimited discretion over the prices charged for the uses of his invention. And third, it would be utterly ruinous to propose that the ILECs "share" their networks at below cost when they must maintain and upgrade them on a continuous basis. From where would the needed revenues come? It follows therefore that the patent analogy fails, and that the only appropriate constitutional treatment is to allow the ILECs to recover their historical costs.

- 13. The proposal to use forward-looking TSLRIC ignores applicable constitutional constraints by shrinking the appropriate rate base for setting interconnection fees. The argument for that proposal is that the lower these fees are, the cheaper it will be for new competitors to enter the field. As an economic matter that proposition guards against the risk that the CLECs will be charged supracompetitive rates. But by the same token an excessive preoccupation with ease of entry could increase the opposite distortion, which is to subsidize the CLECs by setting their rates below cost. A similar result follows if the only concern of the FCC is to insure that the CLECs have an unbridled option to mix and match unbundled items from the ILECs with whatever network components they might wish to build for themselves. See NPRM, at ¶ 75. That posture opens up the possibility that the CLECs could demand that the ILECs construct at their own expense new methods and procedures, which then they choose not to consume, or to consume in negligible quantities. See, Declaration of Raymond F. Albers. ¶ 39, appended to Bell Atlantic's Comments.
- 14. To see the constitutional infirmities of those systematic subsidies, consider the following scenario. Assume that an ILEC were to sell all of its capacity under these mandated transactions at rates based on TSLRIC. Here the receipts from those sales would not, over the useful life of the facility, permit the recovery of the initial costs plus a reasonable rate of return. A fractional loss should be subject to the identical treatment. If the government cannot condemn land worth \$1000 for \$500, then it cannot condemn one tenth of that land, worth \$100 for \$50. The market penetration of the CLECs only goes to the magnitude of the uncompensated taking, not to its existence. Yet throughout, no proposal has been made to make up any shortfall out of any general revenues, or other forms of taxation, which could be introduced if Congress and the FCC wanted to require the resale of interconnection services at artificially deflated prices.
- 15. The proposal for forward-looking TSLRIC pricing is constitutionally infirm, moreover, even if the refusal to compensate for embedded costs somehow escapes constitutional invalidation. The construction of some alternative, but purely hypothetical, rate base predicated on an untested

alternative design ignores many of the real costs that go into making any real-world local exchange system operative. The proposal imagines that in a competitive industry an efficient firm makes all the correct decisions on cost and design for the optimal network the first time out of the box, and has perfect foresight of how technology will develop. Stated in this form, the proposal offers a parody and not a description of a competitive industry. A competitive industry may create incentives for firms to use resources efficiently. But in a world of uncertain technology and future demand, no competitive firm bats 1.000. Those firms with the lowest error rates survive, which is a far cry from saying that no firm makes any errors ever

16. To use a homely comparison, the child's game whereby one child cuts a cake in half and the second gets to pick the slice is designed to create incentives for the cutter to make equal slices. And so it does. But if the ability to cut is not perfect, then the slices will not be even. At this point, it is always better to be the child who chooses, not the child who cuts. The CLECs ask that they be given the preferred position of the child who chooses, while forcing all the irreducible risks of error in network design on the ILECs. Worse still, once the ILECs have incurred all these costs, the CLECs are under no obligation to purchase any portion of the network, or to purchase it for its full useful economic life. (See Albers declaration, supra ¶ 13.) The CLECs therefore receive for free the long-term option to purchase service, but bear none of the risks of providing these services. Indeed no CLEC will ever attempt to build its own facilities, even if these are in fact cheaper, so long as it is allowed to purchase its inputs on an idealized model. See NPRM, ¶ 185, 186; Hausman, Reply Affidavit ¶ 3-5. The applicable constitutional standard requires that rates of return be calculated on a risk-adjusted basis. Yet these hypothetical models of the idealized network implicitly deny compensation for any of the risk elements that would be compensated in a competitive system.

II. Requiring wholesale discounts for the sale of retail services now sold to consumers below cost could raise serious takings issue.

- 17. The current interconnection proposal contemplates the forced sale of wholesale services at a price determined by taking the current retail cost of these services less their avoided costs (e.g. billing). See Act, section 251(c)(4); NPRM, ¶¶ 172-188. The removal of avoided costs reflects sound economic and legal principle, for the ILEC should not be allowed to recover compensation for a current service that it is no longer called upon to provide.
- 18. The constitutionality of the pricing of wholesale services, however, depends on the pricing rules that the FCC authorizes elsewhere under the Act. The system of regulation prior to the

1996 Act, and indeed after it, contemplates providing services to certain segments of the population (e.g., residential and rural customers) below cost. These subsidies could not, of course, survive in a purely competitive regime. They have survived before and after the 1996 Act because other sources of funds have been set aside to cover these subsidies. For example, the right to supply vertical services and intraLATA toll for residential service above cost gave the ILECs sufficient revenue to offset its required losses on mandated services. Yet if these vertical add-ons are treated as unbundled elements that must be provided at cost, instead of as retail services to be supplied at retail prices less avoided costs, then a serious takings issue would be raised, unless some other funds, such as a universal service tax, were levied to cover the gap. The problem cannot be ignored because the various subsidies of the prior legal regime have not been eliminated by the 1996 Act. There is no justification under the takings clause for forcing an ILEC to sell its rival any elements or services at a loss when it has no opportunity to recoup that loss by follow-on sales. The cost rules for the resale of subsidized services should not be used to force the ILECs to subsidize both their own customers and the CLECs who are in direct competition with them. All in all, the FCC must confront the takings issues from the resale of retail services at every stage of its deliberations, in order to insure that each part of the system is coordinated correctly with the whole.

III. The FCC's bill and keep proposal can lead to an uncompensated taking of private property in violation of the fifth amendment.

- 19. I have already written at length about this topic in a statement prepared for Bell Atlantic and SBC in connection with the bill and keep proposal for commercial mobile radio services (CMRS) and the wireline LECs. As a result, I will limit my comments here to indicating how the more general bill and keep proposal differs from that same proposal in connection with CMRS/LEC transactions.
- 20. The point of departure for this analysis is a stripped down transaction in which the division of revenues must be made for the firm that originates the call and the one that terminates it. In principle both of these companies have to bear costs, so that a rule which requires one firm to supply its termination services free of charge necessarily takes from that firm the resources needed to provide service to its competitor.
- 21. The question then arises as to what arguments might justify this departure from the rule that allows individuals to use the services of a rival only if it purchases those services at market value. Here we can easily dismiss the argument that no compensation is required because some

degree of government coercion is necessary to forge all the links of a single carrier network. These links can be forged with equal ease by requiring the originating carrier to turn over the requisite portion of the call revenues to the terminating carrier needed to cover its expenses. The risk of holdout on the network may justify a government regime that forces negotiation between the parties in good faith. It does not justify a regime that requires one party to provide valuable services to its rival for nothing. In line with the general propositions set out above, a sound legal system must avoid not only the risk of hold out but also the risk of confiscation. The bill and keep rule seeks to address the former risk by ignoring the later.

- 22. Second, one cannot justify the uncompensated taking in this setting by urging that it reduces administrative costs. See NPRM, ¶ 241 That argument is never accepted in ordinary market settings where nonowners are required to purchase goods in market transactions. The standard practice is strongly grounded in economic efficiency, for once a given party is allowed to take without compensation, then it will have perverse incentives to consume inordinately large amounts of the resources generated by others. It has no incentive to take into account the costs that grabbing impose on those whose property is taken. Bearing some administrative costs is a small price to pay to prevent the habitual overconsumption of the resources of others that flows from a legally sanctioned right to commandeer at zero price resources that others find costly to produce.
- 23. Nor can the bill and keep proposal be justified on the naive assumption that the volume of calls over the network will balance themselves out automatically so that all sides will be the winner over the long run. To see why, it is important to note that in some settings (as with CMRS, where about 85 percent of the calls are originated from the CMRS provider) it is manifestly false. And in other cases adopting bill and keep would invite new entrants, that are able to tailor their networks, to keep traffic perpetually out of balance, as, for example, by actively courting companies, such as telephone solicitors, that generate a huge volume of outgoing calls while receiving virtually no traffic themselves. The rule which requires compensation in all cases allows firms to reciprocally waive compensation when it is in their mutual interest to do so. In these balanced settings, the zero compensation figure offers a convenient focal point that both firms frequently are willing to accept, as has been shown in practice by the interconnections over some wireline networks. For these cases of the balanced distribution of calls over the network, the bill and keep rule is not necessary, because the desired outcome will be reached routinely by consensual means.
 - 24. It follows therefore that the important cases for bill and keep are those where structural

reasons lead to a systematic long-term imbalance of call origination. And it is precisely in those cases that the financial accounts will not even out in the long-run. The institutionalization of the bill and keep proposal will therefore give one carrier a built-in incentive not to negotiate a voluntary agreement, for why should it give up an administrative windfall unless it receives an equal or greater windfall in exchange? Adopting bill and keep therefore would have the regrettable tendency of freezing into place an inefficient proposal, and an unconstitutional one as well.

- 25. Finally, previously I noted that bill and keep would fail if treated as the sole subject of a its own rate order. Hope Natural Gas requires that all regulatory accounts be balanced within each rate order, so that no regulated industry must accept confiscatory rates today on the strength of a vague promise of compensation at some future unspecified day in some future unspecified forum. In this rulemaking, the bill and keep proposal is blended with determinations governing the pricing of interconnections and of resale of basic ILEC capacity. The previous arguments have shown that, taken alone, there is a substantial risk that each could work an undercompensated taking of ILEC property. The bundling of separate topics within a single rate order does not insulate the entire order from review. Nor does it save each of the separate elements that it contains from constitutional challenge under the takings clause. More specifically, if each of the components of a comprehensive rate order forces a regulated firm to operate at a loss, then none of its components are saved by bundling it into a single package. As was said in the garment industry, you cannot make up in volume the loss you incur in selling each piece. What is required for each loss component with the comprehensive order is some form of implicit compensation elsewhere in the order.
- 26. It does not appear as though the necessary offsets have been provided for here. Instead, the amalgamation of three separate issues into a single hearing only compounds the basic risk. The interconnection rules proposed by various parties ignore historical and other costs and that do not take into account error cost, technological change and demand uncertainty works a taking of ILEC property without just compensation. The provisions for the resale of retail components at wholesale prices could easily be configured in such a way that it too works a taking of private property. A bill and keep order surely works a taking whenever there is a traffic imbalance, and perhaps in other cases as well. The sum of three negatives is a greater negative. These proposals, singly and in combination, threaten to so alter the terms of forced trade between the ILECs and the CLECs that the entire rulemaking proceeding runs the risk of officially authorizing a massive taking from ILECs to CLECs, in violation of the Fifth Amendment to the United States Constitution.

I, Richard A. Epstein, declare under penalty of perjury that the foregoing statement is true and correct to the best of my knowledge and belief.

Richard A. Epstein

May 29, 1996

Determination of Additional Contribution to Cover Forward Looking Shared and Common Costs

The development of a loading factor to include shared and common costs in addition to TSLRIC involves the determination of the TSLRIC, Shared and Common costs. Based on cost studies performed for Maryland the following costs have been identified:

	<u>Amount</u>	% of TSLRIC	Source
Direct Incremental Costs (TSLRIC)	\$820,600,000	-	1
Shared Costs	119,500,000	14.6%	1
Common Overhead Costs	65,648.000	8.0%	2
Total Costs	\$1,005,748,000		
Total Shared and Common Overhead Costs	\$185,148.000	22.6%	

Sources:

- 1. MD Case #8584, Phase II Beard Direct Testimony
- 2. MD Special Study to determine the loading to be added to Direct Costs (TSLRIC) for Common Overhead Costs. The dollar amount was calculated by multiplying the Direct Incremental Costs (TSLRIC) by the Common Overhead Loading percentage determined in the study.

The Total Cost of \$1,005,748,000 represents the Total Forward Looking costs and includes an allocation of shared and common costs. The loading factor of 22.6% represents the shared and common costs to be added to the TSLRIC costs. This calculation does not include any profit as defined by Dr. Alfred E. Kahn and Timothy J. Tardiff in their affidavit on behalf of Bell Atlantic.

E. R. Beard E. M. Wylonis 5/28/96

CERTIFICATE OF SERVICE

I hereby certify that on this 30th day of May, 1996 a copy of the foregoing "Reply Comments of Bell Atlantic" was sent by first class mail, postage prepaid, to the parties on the attached list.

Jonathan R. Shipler

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